

Remarks

Claims 1-7, 9-13, 19-26, 28-33, 35-40, 84-90, 92-97, 102-106, 108-112, 117-118, 120-121, and 124-201 are pending in the present application.

The Office Action has rejected Claims 1-7, 9-13, 19-26, 28-33, 35-40, 84-90, 92-97, 102-106, 108-112, 117-118, 120-121, and 124-201 under 35 U.S.C. 102 as being anticipated by Kagami et al. (JP02155067 A). Applicant respectfully disagrees.

The Abstract of Kagami et al. discloses an inventory warning system in method that utilizes personal *experience and intuition* in predicting and providing warnings of inventory excesses or shortages. Kagami et al. does not disclose determining arrival times, waiting times and inter-arrival times of items in connection with monitoring items being received and disbursed in a predetermined environment, as claimed in Claims 1, 12, 124 and 127. Rather, Kagami et al. discloses forecasting a change in sales based on volume, i.e., a relation between time and the ratio of sales to planned sales in total. U.S. Patent No. 5,128,861 (the “‘861 patent”)¹, Col. 4, lines 35-38 (emphasis added).

Specifically, with respect to Claims 1 and 12, neither Kagami et al., nor the English language equivalent, the ‘861 patent, disclose determining arrival times and waiting times for items. Even more specifically, neither Kagami nor the ‘861 patent disclose any of the following elements and/or limitations: 1) receiving an arrival time, the arrival time being a time when an item was detected by a sensing circuit; 2) determining a waiting time for the item, the waiting time being the amount of time between the arrival time and a later time, the later time being prior to a next time the item is again detected; (3) retrieving a probability distribution over inter-arrival times for the item, an inter-arrival time being the amount of time between an arrival of the item

¹ US Patent No. 5,128,861 is the English language equivalent of Kagami et al.

and a next arrival of the item, the probability distribution being retrieved based on identification characteristic information and the inter-arrival time; (4) determining at a later time that the waiting time is anomalous if a cumulative probability of all inter-arrival times that are greater than the waiting time is less than a predetermined threshold, and (5) if so generating an inter-arrival time event announcement that the waiting time is anomalous.

Similarly, with respect to Claims 124 and 127, neither Kagami et al. nor the '861 patent disclose determining inter-arrival times of items. More specifically, neither reference discloses any of the following elements and/or limitations: 1) receiving a first arrival time, the first arrival time being a time when an item was detected by a sensing circuit; 2) receiving a second arrival time, the second arrival time being a next time the item is again detected by one of the sensing circuits and is later than the first arrival time; (3) determining at a later time an observed inter-arrival time for the item, the observed inter-arrival time being the amount of time between the first arrival time and the second arrival time; (4) retrieving a probability distribution over inter-arrival times for the item, an inter-arrival time being the amount of time between an arrival of the item and a next arrival of the item, the probability distribution being retrieved based on identification characteristic information; (5) determining, by way of said processing circuit, based on said retrieved probability distribution, that said observed inter-arrival time is anomalous if a cumulative probability of all inter-arrival times that are less than said observed inter-arrival time is less than a predetermined threshold; and (6) if so generating an inter-arrival time event announcement that the waiting time is anomalous.

The remaining claims all depend on one of the independent claims discuss above and are allowable for the same reasons the respective independent claim is allowable.

Conclusion

Applicants believe that this case is now in condition for an immediate allowance, and such action is respectfully requested. If any issue remains unresolved, Applicants' counsel would appreciate the opportunity for a telephone interview to expedite allowance.

Respectfully submitted,



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